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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
VU, NGOC K	

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 08/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/386,613	ANDERSON ET AL.	
	Examiner	Art Unit	
	Ngoc K. Vu	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *38-79* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *38-79* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/8/05, 7/5/05*.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/5/05 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 38-79 have been considered but are moot in view of the new ground(s) of rejection.

Oath/Declaration

3. Declaration filed 7/15/05 is defective. Applicant is now required to submit an appropriate declaration or oath under 37 CFR 1.131 to establish invention of the subject matter of the rejected claim prior to the effective date of the reference or activity on which the rejection is based.

Claim Objections

4. Claim 53 and 74 are objected to because of the following informalities: it appears that the term "said first and second attenuation devices" seems to refer to "first and second noise reduction devices" which is previously defined in claims 38 and 59, respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 59, 61-63, 67, 69-73 and 76-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koehler (US 20020138587 A1) in view of Urella et al. (US 5,138,722 A).

Regarding claim 59, Koehler teaches that an audio/visual system for providing select combinations of audio and image signals, the system comprising: an interface device (server 36) receiving a plurality of image signals and a plurality of audio signals associated with an auto race, the interface device transmitting the audio and image signals wherein at least one of the image signals defines an image produced by a camera positioned at the auto race (each of the image signals from cameras in race cars 12-18 provides the views of each of the cars - see figure 1; 0030); a receiver (42) receiving the audio and image signals (see figure 1); an user interface (50) communicating with the receiver for selecting at least one of said image signals (i.e., selecting one or more views from the car views) and at least one of said audio signals (i.e., selecting any team communications or a race participant to listen during the race) based on an input from an user (see 0017; 0018; 0030); a display (42 includes a display or monitor – see 0016) communicating with said receiver, said display receiving said selected image signal and producing a visual image based on said selected image signal (see 0030 and figure 4).

Koehler further teaches that audio signals or communications of teams not selected by the user would be filtered by either the server 36 or the device 42, and not provided to speakers of the device 42 (see 0018). Koehler does not explicitly teach the feature of noise reduction devices configured to be placed over the ears of user. However, Urella teaches that a pair of ear seals 10 of a headset includes noise attenuating material 18 for each ear seal for reducing noise (see col. 3, lines 20-28 and col. 4, lines 43-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Koehler by

including noise attenuating material for each ear seal of a headset as taught as taught by Urella in order to reduce noise levels for use in noise attenuating headset.

Koehler further teaches that audio signals or communications of teams not selected by the user would be filtered by either the server 36 or the device 42, and not provided to speaker of the device 42 (see 0018). Koehler does not explicitly teach the feature of noise reduction devices configured to be placed over the ears of user. However, Urella teaches that a pair of ear seals 10 of a headset includes noise attenuating material 18 for each ear seal for reducing noise (see col. 3, lines 20-28 and col. 4, lines 43-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined teaching of Koehler and Rallison by further including noise attenuating material for each ear seal of a headset as taught as taught by Urella in order to reduce noise levels for use in noise attenuating headset.

Regarding claim 61, the combination teachings of Koehler and Urella comprising speaker(s) coupled to noise attenuation device(s) and configured to produce sounds defined by the selected audio signal (see Koehler: see 0016-0018; Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Regarding claim 62, the combination teachings of Koehler and Urella further show that the selected image signal defines an image produced by a camera positioned within a vehicle participating in the auto race (see Koehler: 0030).

Regarding claim 63, the combination teachings of Koehler and Urella further show that the selected audio signal defines a communication by a driver of a vehicle in an auto race (communication between a driver of a car and his team in auto race – see Koehler: 0013).

Regarding claim 67, the combination teachings of Koehler and Urella as modified by Urella by showing the headset includes noise attenuating components for reducing noise (see Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Regarding claim 69, the combination teachings of Koehler and Urella further show that at least a portion of the plurality of audio signals define different sounds associated with the auto race (i.e., TV commentary – see Koehler: 0020).

Regarding claim 70, the combination teachings of Koehler and Urella teach that at least one of the audio signal defines at least noise from comments between the driver and his team (see Koehler: 0018; Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Regarding claim 71, the combination teachings of Koehler and Urella further show that at least a portion of the plurality of image signals define video images of the auto race (see Koehler: 0030).

Regarding claim 72, the combination teachings of Koehler and Urella further show that the receiver includes a demodulator (within 42) configured to demodulate and separate the image signals based on frequency (demodulating and separating image signals based on frequency/channel from television broadcaster and/or from server 36 – see Koehler: 0030, 0016).

Regarding claim 73, the combination teachings of Koehler and Urella further show that the receiver includes a multiplexer configured to select one of the image signals based on the input from the user (i.e., selecting one or more views/images from the car views – see Koehler: 0030).

Regarding claim 76, the combination teachings of Koehler and Urella further show that the image signals are separately transmitted to the receiver (car views received from server 36 and images received from television broadcaster 69 - see Koehler: figure 1).

Regarding claim 77, the combination teachings of Koehler and Urella further show that the audio signals are separately transmitted to the receiver (i.e., TV commentary via 69 – see Koehler: 0020-0021).

Regarding claim 78, the combination teachings of Koehler and Urella further show that the receiver includes a filter (within 42) configured to output the selected image signal (see Koehler: 0030).

Regarding claim 79, the combination teachings of Koehler and Urella further show that the receiver includes a filter (within 42) configured to output the selected audio signal (see Koehler: 0018).

7. Claims 60, 64-66, 68, 74 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koehler (US 20020138587 A1) in view of Urella et al. (US 5,138,722 A) and further in view of Rallison et al. (US 5,903,395 A).

Regarding claims 60, 64, 68, 74 and 75, Koehler does not teach the system comprising at least one of a strap and a head mount. However, Rallison teaches that a lightweight head-mounted display comprises a strap 16 may be used to assist in holding the device in a desired location and a headphone-like loud speakers are positionable near the user's ear to provide audio to the user (see Rallison: col. 2, lines 30-34; col. 3, lines 64-66 and figures 1-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Koehler by using a lightweight head-mounted display as taught by Rallison in order to provide an audiovisual device which is lightweight and comfortable to wear for viewing/listening video/audio at any places.

With respect to claims 60, 64, 68 and 74, the combination teachings of Koehler, Urella and Rallison further show that the headset including noise attenuating material for each ear seal for reducing noise (see Rallison: figures 1-8; Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Further regarding claim 64, the combination teachings of Koehler, Urella and Rallison show that the noise attenuation device(s) includes a slot adapted to receive the head mount, the slot defined by a wall of the noise attenuation device(s), the wall of the noise attenuation device(s) including a series of notches, the head mount having a ridge that is sequentially received by the notches as the head mount passes through the slot (see Urella: figure 1; Rallison: figures 1-8).

Further regarding claim 68, the combination teachings of Koehler, Urella and Rallison further teach that the head mount and noise reduction devices having ridges and notches joining one another to selectively resist movement of the noise reduction devices with respect to the head mount (see Rallison: figures 1-8, col. 8, line 66 to col. 9, line 5; Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Further regarding claim 75, the combination teachings of Koehler, Urella and Rallison further show that the display is head mounted (see Rallison: figures 1-8) in a manner to limit the user's peripheral view of the surrounding environment.

Regarding claims 65 and 66, Koehler does not explicitly teach that the device 42 is portable and receives the audio and image signals wirelessly. However, Rallison teaches that a head-mounted display is lightweight and compact but yields a high quality image and sound (see abstract and figure 1). Rallison further discloses that the device may receive the data from source via wireless communication (see col. 4, lines 13-28 and abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Koehler by using a portable head-mounted display with the feature addressed above as taught by Rallison in order to provide an audiovisual device which is lightweight and comfortable to carry and view at any places.

Further regarding to claim 65, the combination teachings of Koehler, Urella and Rallison further show that the receiver receive the audio and image signals at a stadium (i.e., track 26 – see Koehler: figure 1), thereby permitting the user to carry the receiver and choose where to view the selected image signal and listen to the selected audio signal (see Rallison: col. 4, lines 13-28 and abstract; see Koehler: 0015, 0017, 0030).

8. Claims 38-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koehler (US 20020138587 A1) in view of Rallison et al. (US 5,903,395 A) and further in view of Urella et al. (US 5,138,722 A).

Regarding claim 38, Koehler teaches an audio/visual device (42) comprising: a receiver (within 42) receiving a plurality of image signals associated with an auto race event and a plurality of audio signals associated with the auto race (see figure 1; 0030; 0015; 0016; 0020); an user interface (50 – see figure 2) communicating with said receiver for selecting at least one of said image signals (i.e., selecting one or more views from the car views) and at least one of said audio signals (i.e., selecting any team communications or a race participant to listen during the race) based on an input from a user to produce selected audio and image signals (see 0017; 0018; 0030), wherein said selected image signal defines an image produced by a camera positioned at the auto race (each of the image signals from cameras in race cars 12-18 provides the views of each of the cars so that the viewer can select one or more views from the car views as he/she desires – 0030 and figure 1); a display (42 includes a display or monitor – see 0016) communicating with said receiver, said display receiving said selected image signal and producing a visual image based on said selected image signal (see 0030 and figure 4).

Koehler does not explicitly teach that the device 42 is portable. However, Rallison teaches that a head-mounted display is lightweight and compact but yields a high quality image and sound (see abstract and figure 1). Therefore, it would have been obvious to one of ordinary

skill in the art at the time the invention was made to modify the device of Koehler by using a portable head-mounted display as taught by Rallison in order to provide an audiovisual device which is lightweight and comfortable to carry.

Koehler further teaches that audio signals or communications of teams not selected by the user would be filtered by either the server 36 or the device 42, and not provided to speaker of the device 42 (see 0018). Koehler does not explicitly teach the feature of noise reduction devices configured to be placed over the ears of user. However, Urella teaches that a pair of ear seals 10 of a headset includes noise attenuating material 18 for each ear seal for reducing noise (see col. 3, lines 20-28 and col. 4, lines 43-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined teaching of Koehler and Rallison by further including noise attenuating material for each ear seal of a headset as taught as taught by Urella in order to reduce noise levels for use in noise attenuating headset.

Regarding claim 39, Koehler as modified by Rallison further teaches that a strap 16 may be used to assist in holding the device in a desired location and a headphone-like loud speakers are positionable near the user's ear to provide audio to the user (see Rallison: col. 2, lines 30-34; col. 3, lines 64-66 and figure 1). The combination teachings of Koehler and Rallison as modified by Urella by showing the headset including noise attenuating material for each ear seal for reducing noise (see Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Regarding claim 40, the combination teachings of Koehler and Rallison further show that the selected image signal defines an image produced by a camera positioned within a vehicle participating in the auto race (see Koehler: 0030).

Regarding claim 41, the combination teachings of Koehler and Rallison further show that the selected audio signal defines a communication by a driver of a vehicle in an auto race (communication between a driver of a car and his team in auto race – see Koehler: 0013).

Regarding claim 42, the combination teachings of Koehler and Rallison further show that at least one of the selected audio and image signals are modulated (at server 36), and further comprising a demodulator (within device 42) demodulating at least one modulated selected audio and image signal (processing the audio and image signals to output to monitor and speaker (see Koehler: 0016 and figures 1 and 4).

Regarding claim 43, the combination teachings of Koehler and Rallison further show that receiver receives a combined audio and image signal (from television broadcaster via 67 or 69 – see Koehler: 0030).

Regarding claim 44, the combination teachings of Koehler and Rallison further show that the receiver is housed in a portable handheld unit to receive the audio and image signals at a stadium (i.e., track 26 – see Koehler: figure 1), thereby permitting the user to carry the receiver and choose where to view the selected image signal and listen to the selected audio signal (as addressed above, Rallison discloses that the audiovisual device is lightweight, compact and comfortable to carry or wear. Moreover, the device may receive the data from source via wireless communication. Thus, the user can carry the device and choose where to view/listen the selected image/audio signal - see Rallison: col. 4, lines 13-28 and abstract; see Koehler: 0015, 0017, 0030).

Regarding claim 45, Koehler as modified by Rallison further teaches that the receiver receives audio and image signals wirelessly (see Rallison: col. 4, lines 25-28).

Regarding claim 46, the combination teachings of Koehler and Rallison as modified by Urella by showing the headset includes noise attenuating components for reducing noise (see Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Regarding claim 47, the combination teachings of Koehler, Rallison and Urella teach that the device comprises a head mount, the head mount and noise reduction devices having ridges and notches joining one another to selectively resist movement of the noise reduction devices with respect to the head mount (see Rallison: figures 1-8, col. 8, line 66 to col. 9, line 5; Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Regarding claim 48, the combination teachings of Koehler and Rallison further show that at least a portion of the plurality of audio signals define different sounds associated with the auto race (i.e., TV commentary – see Koehler: 0020).

Regarding claim 49, the combination teachings of Koehler, Rallison and Urella teach that at least one of the audio signal defines at least noise from comments between the driver and his team (see Koehler: 0018; Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Regarding claim 50, the combination teachings of Koehler and Rallison further show that at least a portion of the plurality of image signals define video images of the auto race (see Koehler: 0030).

Regarding claim 51, the combination teachings of Koehler and Rallison further show that the receiver includes a demodulator (within 42) configured to demodulate and separate the image signals based on frequency (demodulating and separating image signals based on frequency/channel from television broadcaster and/or from server 36 – see Koehler: 0030, 0016).

Regarding claim 52, the combination teachings of Koehler and Rallison further show that the receiver includes a multiplexer configured to select one of the image signals based on the

input from the user (i.e., selecting one or more views/images from the car views – see Koehler: 0030).

Regarding claim 53, the combination teachings of Koehler, Rallison and Urella show that the display and the noise reduction devices are mounted on a head mounted apparatus (see Rallison: figures 1-8; Urella: col. 3, lines 20-28 and col. 4, lines 43-47).

Regarding claim 54, the combination teachings of Koehler and Rallison show that the display is head mounted (see Rallison: figures 1-8) in a manner to limit the user's peripheral view of the surrounding environment.

Regarding claim 55, the combination teachings of Koehler and Rallison further show that the image signals are separately transmitted to the receiver (car views received from server 36 and images received from television broadcaster 69 - see Koehler: figure 1).

Regarding claim 56, the combination teachings of Koehler and Rallison further show that the audio signals are separately transmitted to the receiver (i.e., TV commentary via 69 – see Koehler: 0020-0021).

Regarding claim 57, the combination teachings of Koehler and Rallison further show that the receiver includes a filter (within 42) configured to output the selected image signal (see Koehler: 0030).

Regarding claim 58, the combination teachings of Koehler and Rallison further show that the receiver includes a filter (within 42) configured to output the selected audio signal (see Koehler: 0018).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ngoc K. Vu
Primary Examiner
Art Unit 2611

August 29, 2005